Needle valve supplier in Dubai

UAE Valves is the leading Needle Valve Supplier in Dubai. Among the various major companies in UAE, Dubai has remained prominent and the most renowned for supplying quality needles, not only in their country but across many other different industries within that country. It is an exclusive valve to be used to accurately control fluid flow. The valve consists of a long tapered, needle-shaped plunger, through which fine adjustment in the rate of flow could be very significant, especially for applications requiring accuracy

Generally, people always confuse needle valves with other types. They consider them a check valve or, worse, a gate valve. But these are totally different concepts. So, let us know some of the main differences and the applications for which needle valves are used:

1. Is Needle and Check Valve same?

No, it is not. Though both serve very important roles in fluid systems, they perform pretty diverse jobs:

A needle valve is primarily used to regulate fluid flow. It is perfect for circumstances when accuracy is crucial because of its architecture, which enables incredibly accurate flow adjustments.

Function of a check valve is to guarantee that fluid only flows in one direction. In order to stop backflow in a system, it automatically closes if the flow reverses.

2. Needle Valve vs. Check Valve

The purpose of a needle valve is to provide accurate control over the flow rate of a liquid. In contrast, a check valve lets the liquid flow in one direction, blocking the flow into the other.

Design: To control the current correctly, the needle valves facilitate a long, thin stalk that inserts into a small hole. Comparable to a ball or disc, check valves include a mechanism that opens with the flow and closes when the flow reverses.

Application: Check valves are used to keep the systems' unidirectional flow intact, whereas needle valves are used to regulate fluid flow.

3. Is Needle Valve a Gate Valve?

A needle valve is not a gate valve, though both are a form of valve that controls the fluid flow; these are described below:

Needle valve: Has a very fine, tapered needle stem for the purpose of controlling the liquids or gases' flow.

Gate valve: It features a flat gate that opens and closes sliding to regulate flow, usually in an on/off fashion. This is more appropriate for systems requiring full or no flow, rather than the fine flow regulation characteristic of the needle valve.

4. Industries That Apply Needle Valves

Needle valves are applied for industries that need to have high precision on the aspect of flow control. These include:

Chemical processing: In order to accurately control the flow of chemicals, reactant and solvents, chemical processes use needle valves. This is a must for safety and efficiency in chemical reactions.

Gas and Oil: In the gas and oil sectors, needle valves are usually installed in pipelines, pressure regulation systems, and instrumentation setups. The precise flow control ensures that gases or liquids are handled safely and efficiently under varying pressures.

Aerospace: These systems usually are operated at extreme pressure and temperature conditions. In this regard, needle valves are primarily used for controlling air, fuel, or hydraulic fluid in these systems. Since these applications demand a high degree of precision, they are designed with extreme precision.

Power Generation. It is where the needle valve has been found for controlling fluids and steam along with water applied during the production of power generation. Its precise delivery adds value to the complete process efficiency in ensuring safety measures while producing electricity.

Needles valves have precise control for regulating fluid flow, while check and gate valves have other applications like backflow prevention and on/off flow control, respectively. We are a reputable Needle Valve Supplier in Dubai and we give an exact valve for numerous applications that differ from industries, including chemical processing, gas and oil, aerospace and power generation.

Description:

Materials: SS316, SS316L, Duplex, Inconel 625, SS304, CF8, CF8M, F51, F53, F55,
Class: 150 to 2500
Nominal Pressure: PN10 to PN450
Size: 1/2” to 2”
Ends: Threaded, socket weld, butt weld Operations: Hand wheel operated

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